

Moire R. Creek, Ph.D.
Valent Technical Center
6560 Trinity Court
Dublin, CA 94568
Phone: (925) 948-2965
Fax: (925) 948-2901
e-mail: Moire.Creek@valent.com

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July 12, 2012
Adverse Effects Report:
FIFRA Section 6(a)(2) Information
EPA Company No.: 59639- Valent USA

Document Processing Desk - 6(a)(2)
Office of Pesticide Programs
Document Processing Room S-4900
One Potomac Yard
2777 S. Crystal Drive
Arlington, Virginia 22202

Dear Sir/Madam:

Valent USA Corporation was made aware of the following incident involving Belay (EPA Reg. No.59639-150) and Brigade (a non-Valent USA product) on June 29, 2012. This unconfirmed incident involves a report of bee mortality following an application of two insecticides to cotton on June 16. The details are as follows:

An aerial application that included a tank mix of Belay Insecticide (a 2.13 SC formulation of clothianidin) at 5.29 fl oz/A and Brigade (bifenthrin) 2 EC at 5.0 fl oz/A was made to blooming cotton located at [REDACTED] Wellton, AZ. The target insect was brown stink bug. The adjuvant Exit, which is a spreader activator was included in the tank mix at a rate of 4.03 fl oz/A. The products were applied at 10 GPA.

A total of 126.5 acres of blooming cotton were treated by a fixed wing plane. The timing of the applications was estimated to be from 1915 hrs to approximately 2015 hrs.

Bee mortality was observed by the beekeeper's assistant on June 21st -- 5 days after the application took place. Hives were not checked prior to this time. The number of worker bees was estimated by the hive owner to be reduced by approximately 50%. Dead bees were observed in the vicinity of hives, but not in considerable numbers. The hive owner suspected that most bees had died in the fields or in transit to the hives. Bee mortality inside the hives was minimal. There was no queen mortality. Bee hives did not exhibit any negative disruption in behavior such as brood attempting to get

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larvae and eggs out of the hive and/or cannibalism within the hive. No additional bee mortality was observed after the June 21st assessment.

There were two locations where hives were placed (refer to figure 1 for details). One of those included 84 hives placed directly across the fields (Location B) that were sprayed. The other group of 144 hives was located south of the fields (Location A).

This incident involving bee mortality was considered by the hive owner to be due to the application of the products while bees were actively foraging in the field, prior to dusk. The owner noted that the time of the application was not in compliance with Best Management Practices for bee stewardship in fields around that region. Valent U.S.A. Corporation is not able to confirm these opinions.

Valent U.S.A. Corporation hereby submits this information under the requirements of FIFRA Section 6(a)(2).

Please call me at (925) 948-2965 if you have any questions or require additional information.

Sincerely,



Moire R. Creek, Ph.D.
Manager, Toxicology



